

Description**A PARQUET STRIP, THE USE THEREOF FOR MANUFACTURING A PANEL OR A PARQUET ELEMENT AS WELL AS A PARQUET ELEMENT MANUFACTURED THEREFROM AND A METHOD OF MANUFACTURING A PARQUET STRIP**

The invention relates to a parquet strip in accordance with the preamble of claim 1, the use thereof for manufacturing a panel or parquet element in accordance with the preamble of claim 3, a parquet element manufactured using a parquet strip of this type in accordance with claim 4 as well as a method of manufacturing a parquet strip in accordance with claim 5.

Both when laying parquets of individual parquet strips and when laying prefabricated parquets including a plurality of parquet strips or fillets which are completely glued onto a support, it is important to prevent moisture from penetrating at the individual cross joints between the respective strips and/or parquet elements. Such a moisture penetration which may occur, for instance, by moist cleaning or else by spilled liquids can disadvantageously entail a swelling of the material in the areas concerned, i.e. in the area of cross joints, which gives the parquet an unpleasant appearance and/or even destroys it.

It is known already to prepare parquet elements or panels having two long sides extending in the longitudinal direction of the element and two narrow sides extending in the transverse direction, the one long side including a groove and the opposite long side including a tongue, in such a manner that the faces of the two long sides are provided with an impregnation at least over a part of their elevation. Such impregnation which is usually provided in the faces between the upper side of the tongue and the upper side of the groove and the later walking cover layer with a high degree of certainty prevents, in combination with the glue introduced to the groove and tongue connection, moisture from penetrating the cross joint at the long sides of the individual parquet elements or panels.

It is the object of the invention to further improve the resistance to moisture of parquet strips or panels or parquet elements manufactured therefrom.

The present invention suggests, for achieving this object, a parquet strip in which the faces at the two narrow sides are equally provided with an impregnation at least over a part of their elevations.

Furthermore it is a subject matter of the present invention to use a plurality of such parquet strips for manufacturing a panel or parquet element having two long sides extending in the longitudinal direction of the element and two narrow sides extending in the transverse direction of the element, the one long side including a groove and the opposite long side including a tongue and, apart from the faces of the two long sides, also the faces of the two narrow sides being provided with an impregnation at least over a part of their elevation.

Another subject matter of the present invention is constituted by a parquet element which is manufactured using at least a parquet strip according to the invention as well as a method of manufacturing a parquet strip which substantially excels by the fact that the long and narrow sides are provided with an impregnation at least over a part of their elevation.

The subject matter of the present invention makes it possible to impregnate parquet strips at the faces both at the long sides and the narrow sides so that not only the cross joints in the area of the long sides but also the cross joints in the area of the narrow sides are resistant to moisture penetration. If panels or parquet elements are made up of such parquet strips so that a plurality of such strips is applied to a support consisting of a stress compensating means or symmetry means and a medial layer, at first the individual cross joints in the longitudinal direction and the transverse direction between the individual strips are protected against moisture penetration. Furthermore also the finished panel or parquet element is provided with an impregnation at least over a part of the respective elevation there both at its two long sides which usually have a groove and a tongue and at its two narrow sides and thus it is resistant to moisture penetration.

A parquet composed of parquet strips according to the invention or a prefabricated parquetry floor composed of panels or parquet elements thus has a considerably higher resistance to moisture.

In an advantageous development of the invention the impregnation extends at the faces of the two narrow sides over the entire elevation thereof, which, on the one hand, simplifies

the application of the impregnating agent to the respective faces and, on the other hand, further increases the protection against moisture.

Further details, aspects and advantages of the present invention can be taken from the description hereinafter by way of the drawing, in which

Fig. 1 shows a top view onto a parquet strip according to the invention;

Fig. 2 shows a top view onto a panel or parquet element composed of parquet strips according to the invention as shown in Fig. 1;
and

Fig. 3 shows a section across the panel or parquet element as shown in Fig. 2 by an enlarged representation.

Fig. 1 is a top view onto an individual parquet strip or a fillet, as it is called, altogether denoted with reference numeral 2. The strip 2 has two long sides 4 and 6 and two narrow sides 8 and 10. The visible surface 12 facing upward after completed laying can likewise be seen in the top view.

The strip 2 can either be made of completely massive wood or it consists of a veneer layer, for instance of real wood or synthetic material which forms the later visible surface 12, the veneer layer being applied onto an appropriate supporting layer.

Fig. 2 illustrates, likewise in a top view, a panel or parquet element 14 which is composed of a plurality of the strips 2 (2a, 2b, 2c...). The structure of the parquet element 14 is best evident from Fig. 3 which shows a section along the line III-III in Fig. 2. The parquet element 14 is composed of three layers in the shown embodiment including a so-called stress compensating means or symmetry means 16, a medial or supporting layer 18 and a cover layer consisting of the individual strips 2a, 2b, 2c,... In the supporting layer 18 a groove 20 is formed at one long side 4' of the parquet element 14 and a tongue 22 corresponding thereto is formed in the opposite long side 6'.

The individual layers 16, 18 and 2a, 2b, ... are appropriately connected with each other, for instance glued.

It is known already to provide the long sides 4' and 6' of parquet elements 14 with an impregnation at least in sections, i.e. over a part of the elevation of the faces there. In Fig. 3 this is the face 24 between the upper horizontal surface or wall of the groove 20 and the visible surface 12 and the face 26 between the upper horizontal surface or wall of the tongue 22 and the visible surface 12. The impregnation applied there is to prevent, together with a glue introduced to the groove and tongue connection of the completely laid parquetry floor, moisture penetrating in the area of cross joints of the parquet elements 14 abutting at the long sides 4' and 6' from penetrating the material of the supporting layer 18, for instance, or the connection between the supporting layer 18 and the individual strips 2a, 2b, 2c,....

In the case of the subject matter of the present invention the impregnating material is applied to the individual strips 2 such that both at the long sides 4 and 6 and at the narrow sides 8 and 10 the impregnation is applied at least onto a part of the elevation of the faces defined there. Hence in a later compound either of individually laid strips 2 in accordance with Fig. 1 to obtain a parquetry floor or when arranging the individual strips 2a, 2b, 2c, ... according to Fig. 2 for forming a prefab parquet element (parquet element 14) not only the cross joints 28 at the long sides 4 and 6 of the individual strips 2a, 2b, 2c,... but also the cross joints 30 at the narrow sides of abutting strips 2a, 2b, 2c,... are provided with an impregnation at least over a partial area of their respective elevation. Moreover both the faces 24 and 26 at the long sides 4' and 6' of the parquet element 14 and the narrow sides 8' and 10' of the entire parquet element 14 are provided with an impregnation. The groove and tongue connection of parquet elements 14 adjacent at the long sides 4' and 6' as well as the abutting narrow sides 8' and 10' of parquet elements 14 adjacent in the longitudinal direction and moreover the cross joints 80 and 30 of the individual strips 2a, 2b, 2c,... in the parquet element 14 are thus resistant to penetrating moisture.

The application of the impregnation onto the narrow sides 8 and 10 and/or 8' and 10' can be effected, approximately analogously to the application of the impregnation onto the faces 24 and 26 in the area of the long sides, only over a partial area of the elevation of the surfaces there or else all-over, i.e. over the entire height or thickness of the strip 2 and/or of the parquet element 14.

The type, composition and way of application of the impregnating agent to be used is dependent on the respective conditions, i.e. the material of the strip 2 and/or of the supporting layer 18 and possibly of the stress compensating or symmetry means 16. There are taken into consideration commonly used lacquers, resins, oils, waxes, varnishes etc. They can be applied, for instance by rolling, spreading on, dipping etc. Especially moisture-sensitive kinds of wood, such as beech, but also other kinds of wood or materials for manufacturing the strips 2 and/or the parquet elements or panels 14 can be advantageously protected, by the subject matter of the present invention, against damage by moisture in the area of the cross joints both between individual strips 2 and between individual parquet elements or panels 14.